

Application No.: 10/540,662
Amendment dated: June 27, 2008
Reply to Office Action of December 27, 2007
Attorney Docket No.: 0065.0002US1

Amendments to Specification

Replace the abstract of the disclosure with the following rewritten abstract (presented on a separate page) as indicated below:

--Abstract of the Disclosure

Recovery of nonferrous, rare and precious metals from sulfide minerals and concentrates is described. The hydrometallurgical method of sulfide minerals and concentrates processing, involving sulfide minerals oxidation in aqueous medium using nitrogen oxides, provides that the sulfide materials containing slurry are subjected to oxidation of the sulfide which is realized under controlled conditions of the slurry acidity. Constant neutralization of sulfuric acid formed as a result of the sulfides oxidation is provided. The sulfuric acid is neutralized to acidity level, at which no formation of elementary sulfur occurs, while natural or artificial substances, such as CaC₀₃, MgC₀₃, Ca(OH)₂, CaO, NaOH, CaHP0₄ etc., are used as acidity neutralizers. Oxidation of sulfide minerals is realized under agitation. Oxidation is realized in the range of 20-90°C, mainly in the range of 65-85°C. The liquid-to-solid ratio varies from 1:1 to 5:1, depending on effectiveness of the required precipitate formation and proceeding of the oxidation.--